TABLE 9:
FIBER CONSUMED IN U.S. INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE [a]

MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS [b]					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
TOTAL INDUSTRIAL & OTHER CONSUMER								
1985	2468.3	2080.2	30.6	161.9	968.6	919.1	375.0	13.1
1986	r2601.4	r2231.1	28.1	r169.3	1107.0	926.7	356.9	13.4
1987	r2805.9	2418.5	22.0	166.6	1185.2	1044.7	r374.0	13.4
1988	r2822.1	2489.4	21.0	160.0	1238.6	1069.8	r320.5	r12.2
1989	2841.8	2503.6	25.6	149.3	1265.8	1062.9	329.2	9.0
65 TIRES*								
1985	314.7	311.4	9.8	--	301.6	--	3.3	--
1986	300.1	297.6	9.0	--	288.6	--	2.5	--
1987	316.6	313.9	8.1	--	305.8	--	2.7	--
1988	r312.8	309.9	5.9	--	304.0	--	r2.9	--
1989	315.6	312.6	6.0	--	306.6	--	3.0	--
66 HOSE*								
1985	29.3	27.3	11.8	--	15.1	0.4	2.0	--
1986	30.4	27.6	11.0	--	15.9	0.7	2.8	--
1987	30.2	27.5	9.4	--	17.2	0.9	2.7	--
1988	r34.4	31.3	8.4	--	17.7	5.2	r3.1	--
1989	34.8	32.7	7.1	--	21.9	3.7	2.1	--
67 BELTING*								
1985	43.5	32.7	2.5	--	24.3	5.9	10.8	--
1986	41.7	31.1	3.1	--	23.3	4.7	10.6	--
1987	46.7	37.0	2.5	--	26.6	7.9	9.7	--
1988	r50.1	41.6	1.6	--	24.3	15.7	r8.5	--
1989	55.3	48.9	2.2	--	34.3	12.4	6.4	--
61 MEDICAL, SURGICAL & SANITARY*								
1985	383.6	303.5	--	105.9	58.7	138.9	80.1	--
1986	r457.8	r371.2	--	r116.8	94.4	160.0	86.6	--
1987	r454.6	369.1	--	75.5	102.4	191.2	r85.5	--
1988	r455.2	382.1	--	85.1	117.2	179.8	r73.1	--
1989	459.4	377.9	c	78.1	120.3	179.5	81.5	--
79b UNALLOCATED NONWOVENS*								
1985	140.2	140.2	--	12.9	--	127.3	--	--
1986	149.5	149.5	--	14.9	--	134.6	--	--
1987	223.6	223.6	--	50.5	--	173.1	--	--
1988	257.9	257.9	--	46.7	--	211.2	--	--
1989	265.4	265.4	--	43.6	--	221.8	--	--
79a FIBERFILL, STUFFING & FLOCK*								
1985	354.9	354.9	--	6.5	--	348.4	--	--
1986	368.7	368.7	--	3.1	--	365.6	--	--
1987	403.8	403.8	--	0.4	--	403.4	--	--
1988	420.1	420.1	--	1.7	--	418.4	--	--
1989	418.7	418.7	--	1.6	--	417.1	--	--
70 FELTS*								
1985	23.7	10.6	--	2.0	3.9	4.7	1.0	12.1
1986	25.0	11.7	--	2.2	4.3	5.2	1.0	12.3
1987	20.4	7.1	--	3.2	3.9	8.1	1.0	12.3
1988	r17.6	5.4	--	1.6	3.8	8.9	1.0	r11.2
1989	27.1	18.1	--	1.5	3.2	13.4	1.0	8.0
71 FILTRATION*								
1985	37.4	32.8	--	3.2	5.2	24.4	4.6	--
1986	38.4	32.7	--	4.6	4.1	24.0	5.7	--
1987	r34.5	28.3	--	8.3	3.5	16.5	r6.2	--
1988	r32.9	30.4	--	4.1	3.6	22.7	r2.5	--
1989	34.7	31.2	--	3.9	3.2	24.1	3.5	--

For all lettered and general footnotes to this table and the Apparel, Home Textiles and Floor Covering tables, please see page 214.

TABLE 9:
FIBER CONSUMED IN U.S. INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS INCLUDING FIBER, YARN, FABRIC IMPORTS & WASTE [a] (CONTINUED)

MILLION POUNDS

END USE & YEAR	TOTAL FIBER	MANUFACTURED FIBERS [b]					COTTON	WOOL
		TOTAL	ARTIFICIAL (CELL.)		SYNTHETIC (NONCELL.)			
			YARN	STAPLE*	YARN	STAPLE		
73 ROPE, CORDAGE, FISHLINE, ETC*								
1985	184.3	168.9	0.6	0.4	157.3	10.6	15.4	--
1986	189.8	175.1	0.4	1.7	155.7	17.3	14.7	--
1987	r192.7	167.9	0.9	0.5	158.0	8.5	r24.8	--
1988	r179.8	159.0	0.6	0.1	153.9	4.4	r20.8	--
1989	197.0	177.1	0.6	0.1	174.1	2.3	19.9	--
72 SEWING THREAD*								
1985	127.3	84.5	0.4	6.7	60.4	17.0	42.8	--
1986	129.6	84.6	0.4	3.9	63.5	16.8	45.0	--
1987	r140.2	94.9	0.4	4.1	69.4	21.0	r45.3	--
1988	r151.9	113.5	0.3	1.9	91.0	20.3	r38.4	--
1989	142.9	102.0	0.4	1.8	78.1	21.7	40.9	--
76 PAPER & TAPE REINFORCING*								
1985	6.8	3.9	1.8	0.4	1.7	--	2.9	--
1986	5.5	3.4	0.9	0.1	2.4	c	2.1	--
1987	r7.0	4.7	0.7	0.7	2.5	0.8	r2.3	--
1988	r6.5	4.5	0.4	--	1.2	2.9	r2.0	--
1989	6.5	4.3	1.5	--	0.6	2.2	2.2	--
69,77 ELECTRICAL & REINFORCED PLASTICS*								
1985	31.3	6.3	0.1	--	6.2	--	25.0	--
1986	29.1	4.1	c	--	3.9	0.2	25.0	--
1987	30.4	5.4	c	0.4	4.2	0.8	25.0	--
1988	31.6	6.6	c	1.3	4.2	1.1	25.0	--
1989	40.5	15.5	--	1.2	13.3	1.0	25.0	--
75 COATED & PROTECTIVE FABRICS*								
1985	193.0	135.6	--	10.2	43.9	81.5	57.4	--
1986	197.2	136.2	--	11.6	47.0	77.6	61.0	--
1987	r182.7	119.5	--	3.8	57.2	58.5	r63.2	--
1988	r159.9	105.7	--	3.0	56.1	46.6	r54.2	--
1989	211.2	158.8	--	2.8	82.0	74.0	52.4	--
63-64 TRANSPORATION FABRIC*								
1985	85.4	74.2	--	0.8	53.9	19.5	11.2	--
1986	83.7	72.4	--	1.0	50.5	20.9	11.3	--
1987	r98.7	86.9	--	0.8	53.5	32.6	r11.8	--
1988	r107.4	97.3	--	7.6	48.2	41.5	r10.1	--
1989	118.0	107.5	--	7.2	43.7	56.6	10.5	--
56c NARROW FABRICS*								
1985	105.5	93.0	--	--	93.0	c	12.5	--
1986	122.8	105.3	--	--	105.3	--	17.5	--
1987	122.3	104.1	--	--	104.1	--	18.2	--
1988	129.9	112.1	--	--	111.4	0.7	17.8	--
1989	123.7	105.5	0.1	--	104.4	1.0	18.2	--
74 BAGS & BAGGING*								
1985	60.2	55.1	--	--	54.5	0.6	5.1	--
1986	58.3	53.0	--	--	52.2	0.8	5.3	--
1987	r62.9	57.6	--	0.3	54.8	2.5	r5.3	--
1988	r62.3	58.3	0.1	0.1	57.6	0.5	r4.0	--
1989	54.7	50.4	--	0.1	50.0	0.3	4.3	--
MISCELLANEOUS INDUSTRIAL & CONSUMER-TYPE PRODUCTS*								
1985	347.2	245.3	3.6	12.9	88.9	139.9	100.9	1.0
1986	373.8	306.9	3.3	9.4	195.9	98.3	65.8	1.1
1987	r430.5	359.1	--	18.1	222.1	118.9	r70.3	1.1
1988	r402.9	344.8	3.7	6.8	244.4	89.9	r57.1	1.0
1989	336.3	277.0	7.7	7.4	230.1	31.8	58.3	1.0

* FOR 1989, ARTIFICIAL (CELLULOSIC) STAPLE QUANTITIES WERE PRORATED BASED ON 1988 ACTUAL DATA TO AVOID DISCLOSURE.

Most of the above data are taken from the Fiber Economics Bureau's publication *Manufactured Fiber Handbook*.

NOTE: Data on Glass Fiber are no longer available due to company disclosure. The series including Glass Fiber was last published in the September 1985 issue.

GENERAL NOTES FOR END USE TABLES
ON PAGES 207-213

Units are in million pounds.

- -- Little, or none, of the fiber is used.
- * When an asterisk appears, there is a footnote at the end of the table.
- a. This letter in the title of each table refers the reader to these notes.
- b. Manufactured fiber end use in these tables is divided between Artificial (Cellulosic), (rayon+acetate fibers) and Synthetic (Noncellulosic), (nylon, polyester, acrylic & olefin fiber). Yarn includes monofilaments and olefin "yarn" also includes film fiber and spunbonded polypropylene. Staple includes tow & fiberfill; see Item 79a, Fiberfill, Stuffing & Flock and its footnote on page 216. Certain waste quantities, which are tabulated with staple, are included; see text on page 203.

  The synthetic (noncellulosic) fibers included in this survey, for one or more years, are the acrylic, modacrylic, nylon, olefin (polyethylene & polypropylene), polyester fibers through 1989. 1987- 1989 exclude vinyon fiber.
- c. Less than 50,000 pounds, i.e., nominal.
- d. The staple data are tabulated in the yarn column.
- e. The yarn data are tabulated in the staple column.
- r. This data shows a significant revision compared with the September 1989 ***Fiber Organon*** data.

As described in the footnotes to Items 54a and 54b, apparel linings, pockets and such are tabulated in Items 54a and 54b and not with the applicable garments.

In the Apparel table, the sex and age classifications used are those of the U.S. Census Bureau. Thus **M** means Men's plus Boys' and **W** means all other persons, i.e., Women's, Misses', Juniors', Girls', Children's & Infants'.

NOTES FOR APPAREL ITEMS
PAGES 208-209

For all lettered and general footnotes to this table, see notes above.

40. SHEER HOSIERY:
Includes pantyhose, stockings, body stockings, leotards & tights, sheer knee-highs & anklets and support hose.

19,41. ANKLETS & SOCKS:
Include footsocks, anklets, half-hose, over-the-calf hosiery and nonsheer knee-highs for all ages and both sexes. Also includes infants' and children's waist-highs.

8,29. SWEATERS (MW):
Knitted sweater shirts, scarves, mufflers, gloves, mittens, caps, etc. Pullover, coat & cardigan types, full-fashioned and cut and sewn. Also note Item 57.

57. CRAFT & HANDWORK YARNS:
All yarns for handwork, i.e., knitting, embroidery, crocheting, needlepoint, macramé, crewel and yarn kits for all uses. Does not include sewing thread (Item 72). Olefin yarn for macramé is in Miscellaneous Industrial.

16-18. UNDERWEAR & NIGHTWEAR (M):
Undershirts, shorts & briefs, pajamas, nightshirts, sleepcoats, thermal underwear, etc.

35-39. UNDERWEAR, NIGHTWEAR, BRAS AND FOUNDATIONS:
Underwear and nightwear component includes full and halfslips, panties, petticoats, pettipants, camisoles, vests, briefs and thermal underwear as well as nightgowns, pajamas, sleepcoats, peignoirs, robes, negligees and bedjackets. Also includes bodywear and all children's and infants' underwear & nightwear. **Excludes** the trim, elastic webbing, apparel lace, braid or narrow fabric used in these products.

The bras and foundations include corsets, girdles, combinations and one-piece garments, garter belts, hose supporters, two-way stretch and surgical & maternity foundation garments.

10,31. ROBES & LOUNGEWEAR (MW):
Men's & boys' beach & bathrobes, dressing gowns and smoking jackets, and women's beach & bathrobes and house-breakfast & brunch coats and dressing gowns.

54a. HIGH PILE FABRICS:
Include all applications. End uses such as coatings, collars, linings, backings and paint rollers are included. Napped or brushed fabrics such as fleeces, velvets or corduroys are excluded.

54b. FABRICS FOR LINING:
All manufactured fiber types except high pile fabrics (Item 54a), lining-type fabrics sold as retail piece goods and the lining components of shoes & slippers and luggage and handbags (Miscellaneous Other Consumer-Type). The apparel lining component of this series include main linings, interlinings, zip-in linings (except pile), pocketing and banding as well as the acetate and nylon tricot for laminating. Cotton drapery linings are not included here but are in Item 52. Also not included are interlinings of haircloth, urethane and non-woven fabrics.

43. APPAREL LACE:
Nets and veilings.

56a. NARROW FABRICS: ELASTIC AND NONELASTIC TYPES.
The "narrow woven goods" made by slicing broad woven fabrics are not included. **NARROW FABRIC** quantities for home textiles and industrial uses are shown in those sections.

RETAIL PIECE GOODS:
Are included in Topweight and Bottomweight Fabrics.

TOPWEIGHT FABRICS:
All shirts, blouses, lightweight dress and lightweight fashion fabrics. Fabrics generally weigh 5.0 ounces or less per square yard. Retail piece goods are included.

BOTTOMWEIGHT FABRICS:
Pants, jeans, sportswear, tailored clothing, coats and jackets, career apparel and heavier weight fashion fabrics. Fabrics generally weigh more than 5.0 ounces per square yard. Retail piece goods are included.

OTHER APPAREL:
Men's & women's work gloves and handkerchiefs. Manufactured fiber used for knitted accessories such as scarves, mufflers, gloves, mittens, caps, etc., is in Items 8 & 29.

NOTES FOR HOME TEXTILE ITEMS
PAGES 210-211

For all lettered and general footnotes to this table, see page 214.

HOME TEXTILES:

Data cover the use of each item not only in homes, but also in offices, hotels, institutions, etc. For certain transportation uses, note Items 50a, 63 & 64.

None of the quantities tabulated include any cotton stuffing or filling materials in items such as furniture, pillows, mattresses, comforters & quilts, sleeping bags, seat padding, etc. For the manufactured fibers, however, stuffing & fiberfill is tabulated in the Industrial section. Note text on page 203 regarding the inclusion of certain manufactured fiber waste quantities here. Certain felt quantities are in Item 70.

45. BEDSPREADS:
Tailored & throw spreads, both tufted & woven, as well as the backing. **QUILTS:** Comforters and their outer shell, quilted pads are in Item 47.

46. BLANKETS & BLANKETING:
Woven, knit, needle-punched and flocked full-size and crib blankets and electric blanket shells, as well as the woven acetate or nylon filament yarn bindings thereof. Sizable quantities of rayon, acrylic, nylon & wool waste are included here.

47. SHEETS:
Pillowcases. **OTHER BEDDING:** Outside covers of quilted pads; mattress & mattress pads, civilian cots and sleeping bag shells. Mattress felts are in Item 70.

The manufactured staple quantities here are mainly polyester for sheets and rayon & polyester for bed ticking. The manufactured filament is chiefly polyester for bed ticking.

48. TOWELS & TOWELING:
Woven hand, bath, dish towels, etc. Nonwoven towels, such as "Handi-wipes" and industrial wiping cloths, are in Item 61. The large cotton waste quantity used in these products is not included.

56b. NARROW FABRICS:
Only home textiles applications. See the Apparel and Industrial sections for Narrow Fabrics in those applications.

51. CURTAINS & DRAPERY:
Lace and other types (principally woven) i.e., cafe, tiered & cottage, ruffled, shortie drapes and tailored. Also includes the backing & headers of drapery fabrics. The cotton data include cotton drapery linings. Shower curtains are in Other Home Textiles.

52. UPHOLSTERY:
Furniture slipcovers and vinyl-coated cotton fabrics for upholstery. The olefin & saran webbing for outdoor furniture is included under Narrow Woven Industrial (Item 56c).

OTHER HOME TEXTILES:
Woven & lace napery, such as tablecloths & napkins, doilies, etc., as well as the cotton in window shades. For the manufactured fibers, it includes insect screening & netting. Wall covering fabric is in Miscellaneous Industrial.

NOTES FOR FLOOR COVERING ITEMS
PAGE 211

For all lettered and general footnotes to this table, see page 214.

50. CARPETS & RUGS FACE FIBER (TOTAL):
Sum of 50a & 50b.

50a. FACE YARNS:
Tufted, woven, knitted and needle-punched types. Tufted includes broadloom & roll goods, (including carpet tiles) transportation carpet, bath mats, scatter rugs, and "grass." Woven includes carpets such as Axminster, Velvet, Wilton, etc. Knit goods are mainly scatter rugs. Needle-punched are the indoor outdoor carpets. Item 50a does not include braided, hooked or woven twisted paper carpets.

50b. CARPET BACKING FIBERS:
The Artificial (Cellulosic) Yarn is industrial rayon used for woven carpet chain warps. The Other Yarn is olefin (monofil+film fiber+spunbonded) and small quantities of nylon & polyester filament yarn. The Other Staple is olefin only. The substantial quantities of jute used as woven primary & secondary carpet backing, as well as the jute yarn used in the warp of woven carpets, are not tabulated in Item 50b. Nor does it include the quantities of wool, hair and jute used in carpet and rug pads and cushions.

NOTES FOR INDUSTRIAL & OTHER CONSUMER -TYPE ITEMS
PAGES 212-213

For all lettered and general footnotes to this table, see page 214.

56c. NARROW FABRICS:
Woven labels, industrial webbing, shoelaces, tapes (venetian blinds & industrial), transportation seat belts, auto windlace, channeling & trim, outdoor furniture webs and zipper tapes. These figures exclude transmission & conveyor belting (in Item 67); friction tape and the braided narrow fabric used in electrical applications (in Item 69); and gummed cotton tape (in Item 76).

61. MEDICAL, SURGICAL & SANITARY:
Bandages, gauzes, adhesive tapes & plasters, sanitary napkins & tampons, cotton diapers, rayon disposable diapers, surgical gowns and packs. Medical sutures are tabulated in Item 72. Surgical hosiery is in Items 19 & 40. Not included here is cotton waste & linters nor any nontextiles used for filling materials.

63 & 64. TRANSPORTATION FABRIC:
Auto seat upholstery & slipcovers, sidewall, headlining and sheeting. The cotton quantities include the knit and woven fabric used as the backing for vinyl sheeting. The item includes convertible auto tops & replacements thereof, as well as upholstery used in other kinds of transportation, such as airplanes, railroad & subway cars, buses, etc. it does not include seat padding, transportation rugs (in Item 50), window channeling (in Item 56c), flocking, tassels, trim, etc. The manufactured fiber used for substrates for automotive fabric is included in Item 75.

Notes for Industrial & Other Consumer-Type Items (Continued)

65. **TIRES:**
All types, i.e., automobile, truck, tractor, off-road, bicycle, etc. The data include tire cord & tire cord fabric, chafer and other tire components, i.e., flippers, liners, bead wrap & breaker strips.

The data include imports of tire yarn, cord & fabric and also cover any quantities subsequently exported in cord or fabric form.

The consumption of steel tire cord for the years 1985-1989 inclusive is estimated as follows: 317.6, 327.0, 349.0, 393.0 & 440.3. However, these quantities are **not included** in Item 65.

66. **HOSE:**
Includes wrapped, knitted, braided and woven products. Does not include braided vacuum cleaner hose.

67. **BELTING:**
Includes flat conveyor & transmission belts (both rubber and nonrubber, and mechanical rubber goods).

69 & 77. **ELECTRICAL APPLICATIONS & REINFORCED PLASTICS:**
The cotton quantities are estimated.

Electrical Applications: Electric wire insulation & covering of all kinds plus friction tape and cable wrap, stuffing & identification. The total fiber consumed does not reflect the increased use of plastic and other nonfibrous coatings, of course.

Reinforced Plastics: High-and low-pressure laminates used in the manufacture of construction materials (corrugated & flat sheet, plumbing accessories, etc.), process equipment (tanks & containers, pipes, ducts, etc.), transportation uses (aircraft, autos, trucks, etc.) and marine, missiles, molded electrical parts, housing, seating, trays, etc. Flexible laminates of cotton are tabulated by end use, e.g., vinyl-supported upholstery fabric in Item 63, etc.

70. **FELTS:**
Wet & dry papermakers' felts, mattress felts and cushioning & wicking felts. Apparel felts (e.g., for shirts) are classified by apparel products. Patio and similar "felts" are in Item 50a. Laundry press pads and flatwork ironer pads are in Miscellaneous Industrial. The wool quantity includes some felts used in filtration (recorded here and not in Item 71), but excludes the substantial amounts used in pressed felts.

71. **FILTRATION:**
Woven and nonwoven filters for wet & dry filtration, including tea bags. The small wool quantity used in the copper refining industry is included in Item 70.

The fiber used in cigarette filtration is **not included** in this end use or in the Industrial Uses totals.

72. **SEWING THREAD:**
Home sewing and industrial & weight goods, as well as medical sutures.

73. **ROPE** (Braided & twisted), **CORDAGE** (under 3/16"), **FISHLINE, ETC:**
Includes hawsers, baler or harvest twine, clothesline, tying twine, etc., as well as fishnets, seines & netting twine.

74. **BAGS & BAGGING:**
Manufactured Other Yarn is nylon mailbags plus olefin leno mesh & close-woven bags, including sandbags; also includes olefin bagging for wool bales. Carpet backing bale wrap is in Other Industrial.

75. **COATED & PROTECTIVE FABRICS:**
For the manufactured fibers, tents & tarpaulins, as well as the substrates for vinyl, rubber or urethane coating, lamination or impregnation. Examples of specific end uses covered include parachutes, deceleration chutes & tow targets, awnings, beach, garden & tractor umbrellas, inflatable dunnage & cushions, air-supported structures & automotive air-spring diaphragms and boat & pool covers.

The cotton quantities include awnings, boat covers, tarpaulins and tents. **Not included** here are the cotton quanities used for vinyl substrates; such quantities are tabulated with their appropriate end use, i.e., transportation upholstery (Items 63 & 64), upholstery (Item 52), etc. Manufactured fiber surfaces for recreational fields are not included in this survey.

76. **PAPER & TAPE REINFORCING:**
Gummed and pressure-sensitive tape, as well as nonwoven bonded structures for paper, tape and ribbon reinforcing.

79a. **FIBERFILL, STUFFING & FLOCK:**
All applications (apparel, home textiles & industrial). Both graded fiber and waste are included. The consumption of polyester staple & tow in fiberfill for the years 1985-1989 inclusive was: 282.5, 294.9, 348.6, 357.2 & 349.5. For the same years, use of polyester waste for stuffing and filling materials was: 50.9, 60.3, 45.3, 50.1 & 56.2.

79b. **UNALLOCATED NONWOVENS:**
All nonwoven quantities remaining after the identifiable nonwoven end uses, such as medical, surgical & sanitary, filtration, coated & protective fabrics, and paper & tape reinforcing, have been calculated.

MISCELLANEOUS INDUSTRIAL & OTHER CONSUMER-TYPE PRODUCTS:
The cotton for abrasives, book binding, luggage & handbags, shoes & slippers, tobacco cloth, woven wiping cloths and wall-covering fabrics. For rayon, it includes asbestos carrier fiber, laundry supplies and mop yarns. For olefin yarn, it includes agricultural cloth, bale wrap, cable binding, civil engineering fabrics and macramé and other craft yarns.

TABLE 10:
SELECTED U.S. MANUFACTURED FIBER IMPORTS BY COUNTRY OF ORIGIN
THOUSAND POUNDS

ITEMS & COUNTRY	1990 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR TO DATE 1990	1989
ARTIFICIAL (CELLULOSIC) YARN, MONOFIL & STRIPS														
AUSTRIA	67	3	1	89	68	83	159						470	150
BRAZIL	26	53	53	74	165	107	82						560	448
CANADA	528	303	171	405	377	432	350						2666	4275
CHILE	0	309	66	44	287	44	111						861	224
GERMANY, FED. REP. OF	422	516	844	684	783	506	528						4283	3871
IRELAND	145	0	36	35	34	36	105						391	388
JAPAN	104	72	111	104	170	164	29						754	908
KOREA, REP. OF	0	22	33	22	29	0	11						117	177
MEXICO	102	4	121	78	100	116	149						670	981
NETHERLANDS	282	264	345	178	275	483	317						2144	1580
UNITED KINGDOM	34	22	60	0	38	52	51						257	676
ALL OTHER COUNTRIES [a]	21	56	22	49	25	42	37						252	745
TOTAL ARTIFICIAL YARN	1831	1624	1863	1762	2351	2065	1929						13425	14423
ARTIFICIAL (CELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	319	493	108	1254	910	2497	1851						7432	2553
CANADA	4973	3854	4391	4333	4128	4049	4139						29867	21719
GERMANY, FED. REP. OF	89	134	257	322	347	243	484						1876	820
JAPAN	143	204	126	131	238	69	176						1087	1607
POLAND	124	171	43	46	0	109	35						528	189
SWEDEN	118	71	49	72	0	4	24						338	76
SWITZERLAND	0	27	0	14	0	0	0						41	503
TAIWAN	354	988	1323	964	1732	1242	1294						7897	728
UNITED KINGDOM	89	93	73	37	162	46	917						1417	716
ALL OTHER COUNTRIES [b]	95	59	91	18	32	866	3074						4235	2597
TOTAL ARTIFICIAL STAPLE+TOW	6304	6094	6451	7191	7549	9125	11994						54718	31508
SYNTHETIC (NONCELLULOSIC) YARN, MONOFIL & STRIPS														
ARGENTINA	0	0	43	34	9	0	81						167	1604
BELGIUM	776	122	589	594	1384	786	322						4573	1489
BRAZIL	70	71	57	150	118	76	47						619	767
CANADA	3834	2895	4150	3775	4492	3853	4734						27733	20807
COSTA RICA	762	517	497	462	787	470	366						3861	3232
ECUADOR	53	16	67	67	75	34	68						380	413
FRANCE	2007	1305	1065	1378	1223	1302	915						9195	7785
GERMANY, FED. REP. OF	2096	2021	1480	1546	2024	1917	1450						12534	17840
ITALY	892	434	593	905	861	313	755						4753	4631
JAPAN	760	658	505	573	356	622	469						3943	4151
KOREA, REP. OF	31	0	90	20	46	42	72						301	376
MEXICO	1393	900	1607	1396	1145	1967	2063						10471	15839
NETHERLANDS	103	305	921	219	117	195	204						2064	1396
PORTUGAL	62	234	49	42	62	0	0						449	304
SINGAPORE	16	16	0	0	33	0	33						98	107
TAIWAN	791	227	114	818	437	959	315						3661	11365
THAILAND	58	93	95	123	64	65	66						564	623
UNITED KINGDOM	1881	1492	2076	1029	1282	1718	255						9733	10828
ALL OTHER COUNTRIES [c]	351	85	147	79	79	91	122						954	2457
TOTAL SYNTHETIC YARN	15936	11391	14145	13240	14594	14410	12337						96053	106014
SYNTHETIC (NONCELLULOSIC) STAPLE+TOW+TOPS														
AUSTRIA	0	53	11	11	6	14	6						101	105
AUSTRALIA	38	120	30	72	63	106	89						518	482
BELGIUM	1	16	0	158	0	78	15						268	343
CANADA	3703	2439	3082	2325	2156	1402	1950						17057	7908
FRANCE	592	297	769	436	558	364	529						3545	2052
GERMANY, FED. REP. OF	1017	1236	1063	1205	1618	1398	1044						8581	10709
INDIA	1731	1055	4215	0	2528	1752	1810						13091	9702
IRELAND	0	26	0	0	0	84	80						190	1449
ITALY	422	318	534	204	206	176	85						1945	1293
JAPAN	1754	1763	2307	1539	1531	1874	2013						12781	14787
KOREA, REP. OF	1786	1273	1778	2043	3441	4750	4477						19548	29151
MEXICO	3590	2041	2015	2355	3385	1382	932						15700	4681
NETHERLANDS	1	0	57	20	10	20	0						108	498
SPAIN	35	0	0	0	0	93	32						160	418
SWITZERLAND	399	124	87	385	107	280	105						1487	1020
TAIWAN	888	572	931	1400	1476	1215	1458						7940	6587
TURKEY	112	114	0	0	0	0	76						302	256
UNITED KINGDOM	2249	1868	2834	2159	2242	1157	828						13337	13917
ALL OTHER COUNTRIES [d]	549	326	137	92	219	1362	1099						3784	213
TOTAL SYNTHETIC STAPLE+TOW	18867	13641	19850	14404	19546	17507	16628						120443	105569

a. Italy 78, France 34, India 34, Ecuador 33, Taiwan 22, Belgium 20, Uruguay 13, Turkey 12, Thailand 5, Hong Kong 1.
b. Finland 2048, Spain 994, Thailand 646, Yugoslavia 230, Italy 112, France 72, Netherlands 57, China, PRC 40, Mexico 29, Brazil 7.
c. Spain 232, Ireland 159, Turkey 98, Switzerland 84, Paraguay 83, El Salvador 61, Sweden 49, Morocco 47, Austria 44, Hong Kong 42, Finland 22, Yugoslavia 8, Haiti 6, Colombia 5, Greece 5, Honduras 5, Australia 2, Dominican Republic 2.
d. Brazil 2283, Venezuela 395, China, PRC 321, Thailand 209, Sweden 180, Malaysia 136, Romania 86, Hong Kong 64, Denmark 63, Poland 47.

TABLE 11:
U.S. MANUFACTURED FIBER IMPORTS
THOUSAND POUNDS

ITEM	1990 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR TO DATE 1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	242	208	240	163	110	92	266						1321	1472
TEXTURED	54	8	0	33	32	81	32						240	729
OTHER	1385	1371	1471	1528	2171	1855	1524						11305	11554
MONOFILAMENTS & STRIPS	150	37	152	38	38	37	107						559	668
SUBTOTAL ABOVE	**1831**	**1624**	**1863**	**1762**	**2351**	**2065**	**1929**						**13425**	**14423**
STAPLE	5989	5884	6154	6846	7218	8895	11534						52520	31276
TOW	312	210	307	342	331	230	460						2192	181
TOPS	3	0	0	3	0	0	0						6	51
SUBTOTAL ABOVE	**6304**	**6094**	**6461**	**7191**	**7549**	**9125**	**11994**						**54718**	**31508**
WASTE	**0**	**0**	**0**	**22**	**0**	**88**	**44**						**154**	**400**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	1435	856	1437	1000	1336	1220	1207						8491	10487
TEXTURED														
UP TO 450 DENIER	270	333	253	338	520	212	297						2223	2213
OVER 450 DENIER	2936	1350	2132	3039	3721	3074	3821						20073	7925
OTHER	4531	3817	4273	2090	2435	3285	340						20771	28270
MONOFILAMENTS & STRIPS	216	117	148	191	134	164	152						1122	781
SUBTOTAL ABOVE	**9388**	**6473**	**8243**	**6658**	**8146**	**7955**	**5817**						**52680**	**49676**
POLYESTER														
HIGH TENACITY	614	408	506	421	345	457	545						3296	5095
TEXTURED	785	643	626	923	581	1368	1278						8204	11967
POY	719	119	117	758	251	716	206						2886	10898
OTHER	2038	1457	1459	1683	1949	1300	1243						11129	10534
MONOFILAMENTS & STRIPS	53	0	67	40	53	38	57						308	401
SUBTOTAL ABOVE	**4209**	**2627**	**2775**	**3825**	**3179**	**3879**	**3329**						**23823**	**38895**
OTHER SYNTHETIC FILAMENT														
TEXTURED	1451	1408	2224	1880	2281	1847	2207						13298	11174
OTHER	277	223	301	276	307	324	410						2118	2616
MONOFILAMENTS & STRIPS	611	660	602	601	681	405	574						4134	3653
SUBTOTAL ABOVE	**2339**	**2291**	**3127**	**2757**	**3269**	**2576**	**3191**						**19550**	**17443**
STAPLE														
NYLON	4048	3037	4055	3032	3267	2179	2715						22333	11199
POLYESTER	9261	5813	9622	6652	12118	11296	10832						65594	60794
ACRYLIC	1711	1729	2063	1586	860	1458	1273						10680	10108
POLYPROPYLENE	543	37	160	27	105	90	173						1135	1258
OTHER	196	190	320	146	151	362	251						1616	3194
TOW														
NYLON	409	308	555	385	603	471	647						3378	2312
POLYESTER	15	70	70	2	26	174	161						518	590
ACRYLIC	2512	1973	2649	2252	2133	1350	513						13382	13285
OTHER	70	5	35	105	135	0	6						356	397
TOPS	102	479	321	217	148	127	57						1451	2432
SUBTOTAL ABOVE	**18867**	**13641**	**19850**	**14404**	**19546**	**17507**	**16628**						**120443**	**105569**
WASTE														
NYLON	2694	2074	1628	1933	1267	1940	2123						13659	13361
POLYESTER	2703	2241	1882	1067	3127	2128	1675						14823	6392
OTHER	444	571	1027	602	838	876	568						4926	3346
TOTAL MANUFACTURED FIBERS ABOVE	**48779**	**37636**	**46856**	**40221**	**49272**	**48139**	**47298**						**318201**	**281013**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	115	59	54	62	59	121	89						559	637
SPUN YARN	427	503	318	594	534	436	436						3248	2835
SPUN YARNS														
SYNTHETIC	2420	2155	2639	1902	2841	2270	1903						16130	33432
ARTIFICIAL	0	0	0	0	0	0	0						0	0
PUT UP FOR RETAIL SALE	32	24	70	34	87	88	106						441	416
GRAND TOTAL ABOVE	**51773**	**40377**	**49937**	**42813**	**52793**	**51054**	**49832**						**338579**	**318333**

SOURCE: U.S. Census Bureau Report IM145X.

TABLE 12:
U.S. MANUFACTURED FIBER EXPORTS
THOUSAND POUNDS

ITEM	1990												YEAR TO DATE	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1990	1989
ARTIFICIAL (CELLULOSIC) FIBER														
FILAMENT YARN														
HIGH TENACITY	92	37	44	6	45	157	260						641	213
TEXTURED	217	9	30	284	101	114	104						859	1576
OTHER	66	106	57	64	46	18	63						420	922
MONOFILAMENTS & STRIPS	97	0	15	11	26	3	9						161	225
SUBTOTAL ABOVE	**472**	**152**	**146**	**365**	**218**	**292**	**436**						**2081**	**2936**
STAPLE	1195	2051	1838	1329	1645	1171	1168						10397	12387
TOPS	333	0	203	187	185	58	0						966	339
SUBTOTAL ABOVE	**1528**	**2051**	**2041**	**1516**	**1830**	**1229**	**1168**						**11363**	**12726**
WASTE	**330**	**407**	**614**	**547**	**603**	**587**	**329**						**3417**	**8329**
SYNTHETIC (NONCELLULOSIC) FIBERS														
FILAMENT YARN														
NYLON														
HIGH TENACITY	7757	7357	9332	8892	15463	10230	8865						67896	68177
TEXTURED														
UP TO 450 DENIER	1571	588	626	2098	791	751	644						7069	5071
OVER 450 DENIER	5636	4353	5225	4130	3350	4019	3295						30008	30544
OTHER	2637	2264	3143	2401	2191	2066	1248						15950	14705
MONOFILAMENTS & STRIPS	8	32	93	33	42	35	14						257	1604
SUBTOTAL ABOVE	**17609**	**14594**	**18419**	**17554**	**21837**	**17101**	**14066**						**121180**	**120101**
POLYESTER														
HIGH TENACITY	4308	5166	5459	4737	3944	4664	3644						31922	23836
TEXTURED	3074	3021	4078	3508	3650	4310	1507						23148	20778
POY	1831	2368	1287	1783	2918	1306	749						12242	9778
OTHER	1297	1746	1824	1275	2294	1566	1061						11063	6299
MONOFILAMENTS & STRIPS	185	285	91	93	188	186	116						1144	1665
SUBTOTAL ABOVE	**10695**	**12586**	**12739**	**11396**	**12994**	**12032**	**7077**						**79519**	**62356**
OTHER SYNTHETIC FILAMENT														
TEXTURED	535	523	549	801	424	434	461						3727	5871
OTHER	2035	2007	2279	2972	4061	1909	1369						16632	10893
MONOFILAMENTS & STRIPS	876	913	1664	1218	1223	1230	831						7955	5596
SUBTOTAL ABOVE	**3446**	**3443**	**4492**	**4991**	**5708**	**3573**	**2661**						**28314**	**22360**
STAPLE														
NYLON	3163	2765	2343	3257	2210	1729	1591						17058	21558
POLYESTER	7157	6405	9490	7701	8861	6382	4256						50252	77048
ACRYLIC	4584	3178	3882	3936	4697	6363	4961						31601	46819
POLYPROPYLENE	2038	1561	2666	3226	2211	2805	2562						17069	13484
OTHER	2688	923	1504	961	1818	1062	802						9758	12418
TOW														
NYLON	121	176	155	304	145	191	152						1244	522
POLYESTER	18	64	0	100	6	52	321						561	2876
ACRYLIC	1710	1787	989	956	1245	1506	2418						10611	11651
OTHER	26	12	15	243	0	679	7						982	807
TOPS	3984	2729	2309	4760	2552	4741	7817						28892	11105
SUBTOTAL ABOVE	**25489**	**19600**	**23353**	**25444**	**23745**	**25510**	**24887**						**168028**	**198288**
WASTE														
NYLON	4117	4250	3894	2746	3957	3139	3630						25733	15248
POLYESTER	3268	2845	2782	3321	2596	1833	1190						17835	27115
OTHER	3343	3700	4979	4352	499	6193	3494						31055	48132
TOTAL MANUFACTURED FIBERS ABOVE	**70297**	**63628**	**73459**	**72232**	**78**	**71489**	**58938**						**488525**	**517591**
OTHER MFRD. FIBER YARN & THREAD														
SEWING THREAD														
FILAMENT	28	45	32	25	68	13	128						339	324
SPUN YARN	0	0	0	0	0	0	0						0	0
SPUN YARNS														
SYNTHETIC	3007	4304	3749	4278	4103	3890	3415						26746	19482
ARTIFICIAL	0	0	0	0	0	0	0						0	0
PUT UP FOR RETAIL SALE	287	398	641	746	789	715	970						4546	4352
GRAND TOTAL ABOVE	**73619**	**68375**	**77881**	**77281**	**83442**	**76107**	**63451**						**520156**	**541749**

SOURCE: U.S. Census Bureau Report EM522.

TABLE 13:
SELECTED U.S. MONTHLY FIBER DATA

MILLION POUNDS

ITEM	1990 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR TO DATE[a] 1990	1989
MANUFACTURED FIBER TOTAL SHIPMENTS[b,c]														
ARTIFICIAL (CELLULOSIC)														
YARN	15.1	15.4	17.4	18.1	17.4	16.9	19.1	17.3					136.7	147.7
RAYON STAPLE	30.1	25.3	26.3	28.2	25.1	22.6	24.8	25.0					207.4	254.4
TOTAL ARTIFICIAL (CELLULOSIC)	45.2	40.7	43.7	46.3	42.5	39.5	43.9	42.3					344.1	402.1
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	24.9	30.3	28.4	28.4	28.8	27.6	24.9	30.6					223.9	246.6
- CARPET	86.5	81.1	82.2	85.6	80.1	75.8	71.8	88.4					651.5	639.5
- TEXTILE	28.9	28.2	29.9	32.0	32.0	31.3	29.0	31.0					242.3	268.8
POLYESTER - INDUSTRIAL[d]	27.2	28.6	31.8	32.9	30.1	30.2	28.2	29.6					238.6	246.9
- TEXTILE[f]	56.6	56.2	58.0	69.8	68.4	61.4	59.2	69.1					498.7	567.5
OLEFIN[e]	107.2	116.5	116.7	124.2	124.5	122.2	117.4	125.8					954.5	836.9
TOTAL YARN	331.3	340.9	347.0	372.9	363.9	348.5	330.5	374.5					2809.5	2806.2
STAPLE+TOW+FIBERFILL														
NYLON	88.8	74.9	86.0	85.0	87.0	77.6	72.2	87.7					659.2	651.2
ACRYLIC+MODACRYLIC	40.4	39.7	43.2	39.7	43.0	43.8	38.6	45.5					333.9	370.1
POLYESTER	168.9	175.7	173.2	182.2	176.3	167.6	156.7	180.3					1380.9	1607.7
OLEFIN	30.3	34.4	35.3	35.1	36.0	37.1	31.4	32.0					271.6	253.6
TOTAL STAPLE	328.4	324.7	337.7	342.0	342.3	326.1	298.9	345.5					2645.6	2882.6
TOTAL SYNTHETIC (NONCELLULOSIC)	659.7	665.6	684.7	714.9	706.2	674.6	629.4	720.0					5455.1	5688.8
TOTAL MANUFACTURED FIBER	704.9	706.3	728.4	761.2	748.7	714.1	673.3	762.3					5799.2	6090.9
MANUFACTURED FIBER END-OF-MONTH STOCK														
ARTIFICIAL (CELLULOSIC)														
YARN	9.7	9.9	8.8	9.1	7.6	8.7	8.9	8.3					8.3	10.7
RAYON STAPLE	20.2	17.2	14.0	14.2	11.9	10.1	12.4	10.6					10.6	16.3
TOTAL ARTIFICIAL (CELLULOSIC)	29.9	27.1	22.8	23.3	19.5	18.8	21.3	18.9					18.9	27.0
SYNTHETIC (NONCELLULOSIC)														
YARN+MONOFILAMENTS														
NYLON - INDUSTRIAL[d]	36.8	33.7	33.4	36.0	30.1	35.7	42.2	36.9					36.9	27.3
- CARPET	60.5	61.2	62.6	63.2	65.4	78.2	82.3	70.2					70.2	59.3
- TEXTILE[f]	57.0	59.9	64.3	63.5	63.5	62.9	62.1	60.2					60.2	54.1
POLYESTER - INDUSTRIAL[d]	39.3	40.6	39.5	39.2	37.9	35.8	35.6	35.5					35.5	32.3
- TEXTILE[f]	94.5	104.9	109.9	106.4	99.7	100.8	100.2	91.5					91.5	115.7
OLEFIN[e]	68.1	66.6	66.0	63.9	63.8	65.2	63.6	62.6					62.6	60.6
TOTAL YARN	356.2	366.9	375.7	372.2	360.4	378.6	386.0	356.9					356.9	349.3
STAPLE+TOW+FIBERFILL														
NYLON	40.1	40.5	37.1	44.3	47.7	60.5	65.3	59.6					59.6	46 9
ACRYLIC+MODACRYLIC	69.5	70.9	72.8	75.3	78.9	83.2	87.0	86.3					86.3	69.3
POLYESTER	193.5	195.1	192.9	217.4	210.8	212.4	216.8	197.1					197.1	233.6
OLEFIN	34.6	33.4	31.5	29.8	28.5	28.6	29.8	29.6					29.6	34.1
TOTAL STAPLE	337.7	339.9	334.3	366.8	365.9	384.7	398.9	372.6					372.6	383.9
TOTAL SYNTHETIC (NONCELLULOSIC)	693.9	706.8	710.0	739.0	726.3	763.3	784.9	729.5					729.5	733.2
TOTAL MANUFACTURED FIBER	723.8	733.9	732.8	762.3	745.8	782.1	806.2	748.4					748.4	760.2
COTTON CONSUMPTION														
RAW COTTON	317.3	332.1	365.9	327.8	336.8	379.5	293.8						2353.2	2277.1
WOOL CONSUMPTION[g]	1ST QUARTER		2ND QUARTER		3RD QUARTER		4TH QUARTER							
APPAREL CLASS WOOL	31.7		32.4										64.1	69.9
CARPET CLASS WOOL	3.8		3.6										7.4	7.2
TOTAL RAW WOOL	35.5		36.0										71.5	77.1

a. "Year to date" totals for stock, are the latest month's figures.
b. The monthly production of each fiber may be calculated as total shipments plus a stock increase, or less a stock decrease, over the month.
c. Producers' total domestic shipments plus export shipments.
d. Industrial is defined as 500 denier and coarser with an Instron tenacity of 7 grams or more per denier.
e. Olefin yarn+monofilaments also includes spunbonded polypropylene and film fiber produced for textile end uses.
f. Includes low denier industrial yarn.
g. **Wool data for 1990 available on a quarterly basis only.**